

System of
Environmental
Economic
Accounting

OVERVIEW OF THE SEEA ECOSYSTEM ACCOUNTING REVISION PROCESS

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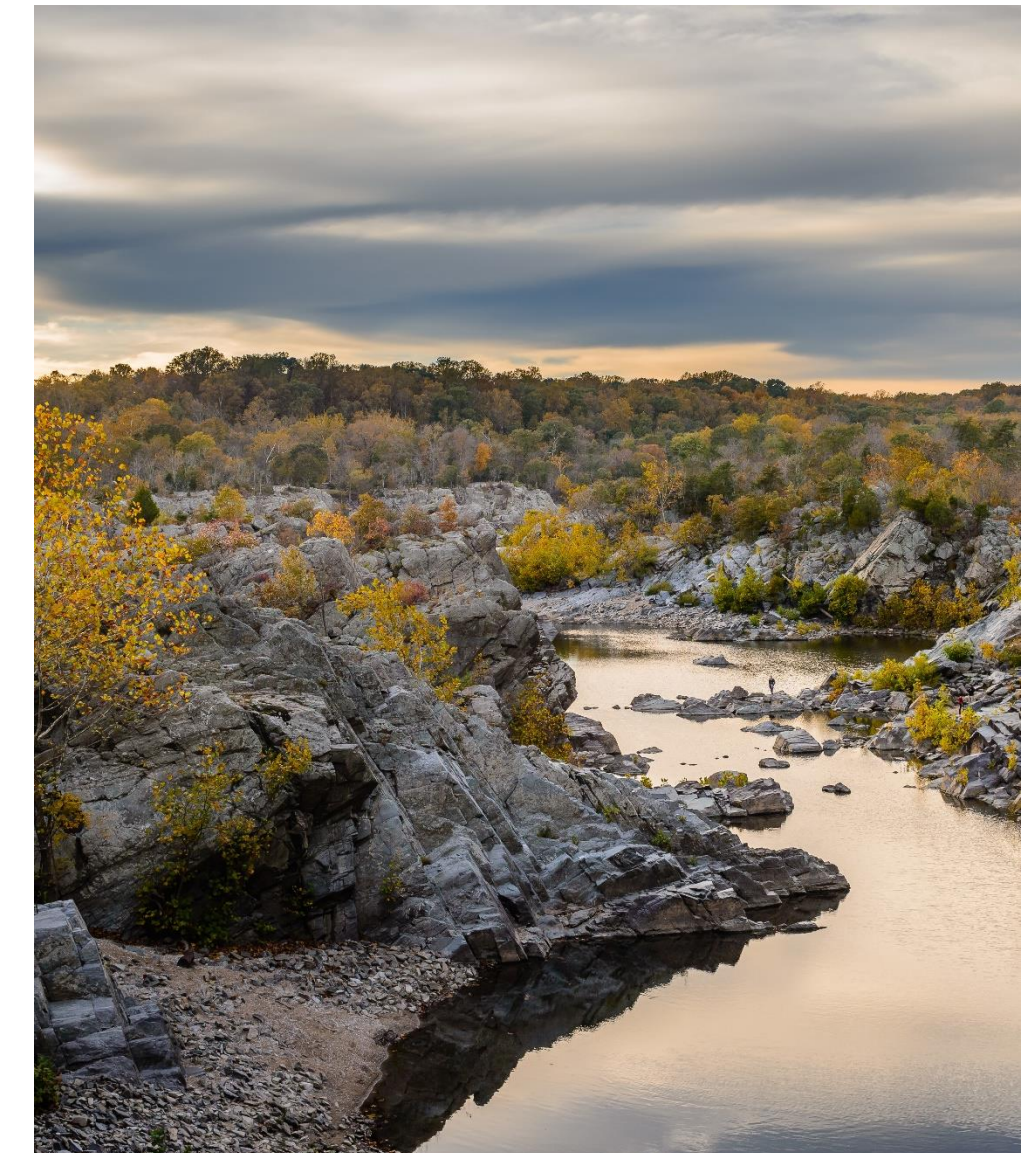
United Nations Statistics Division



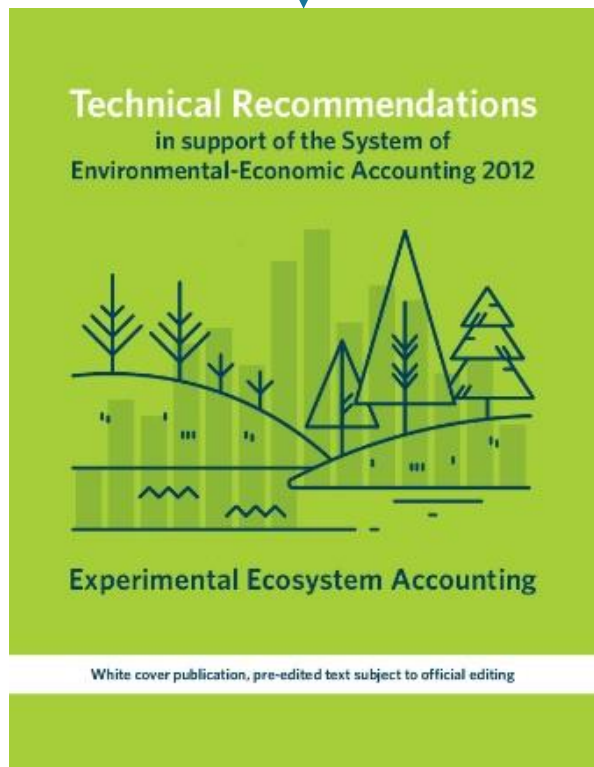
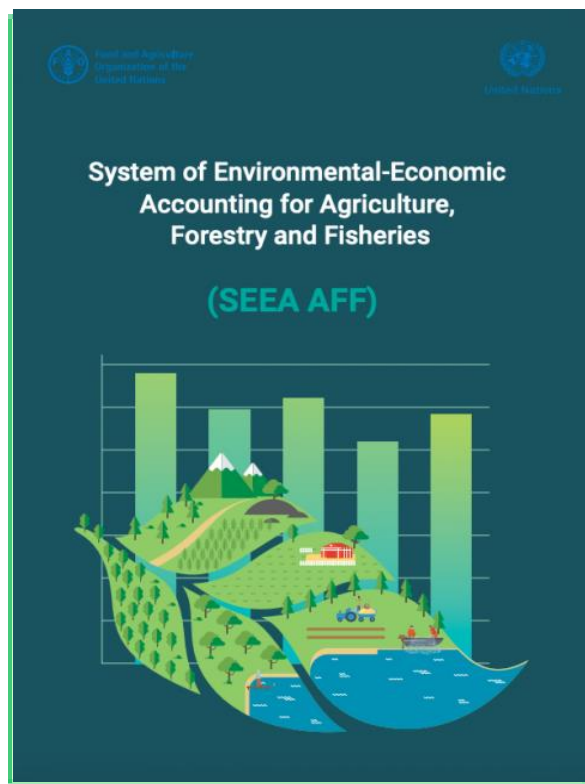
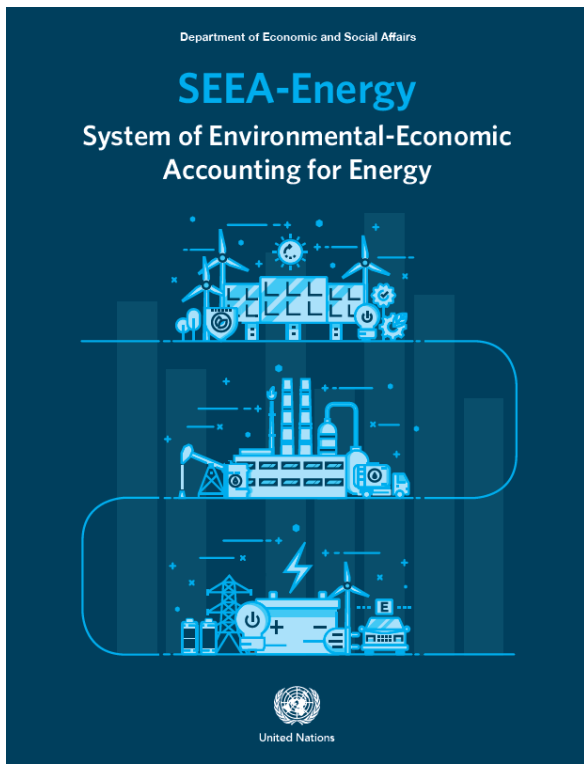
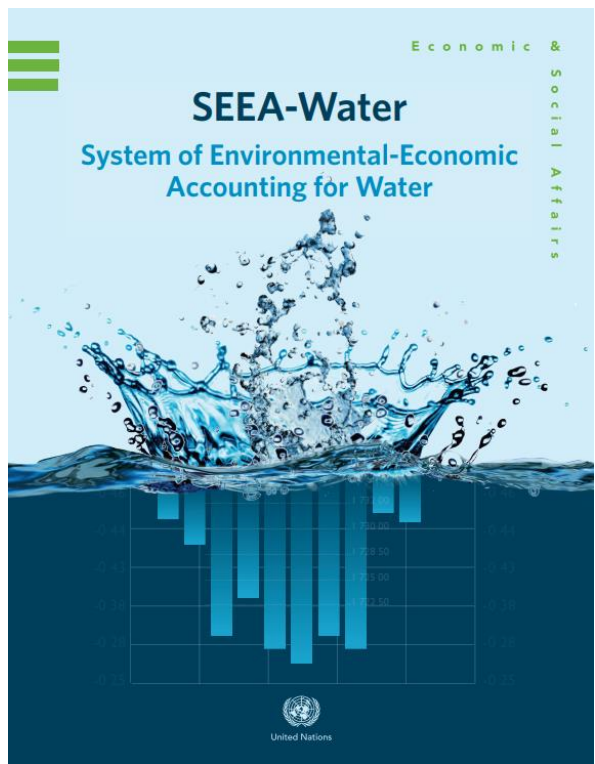
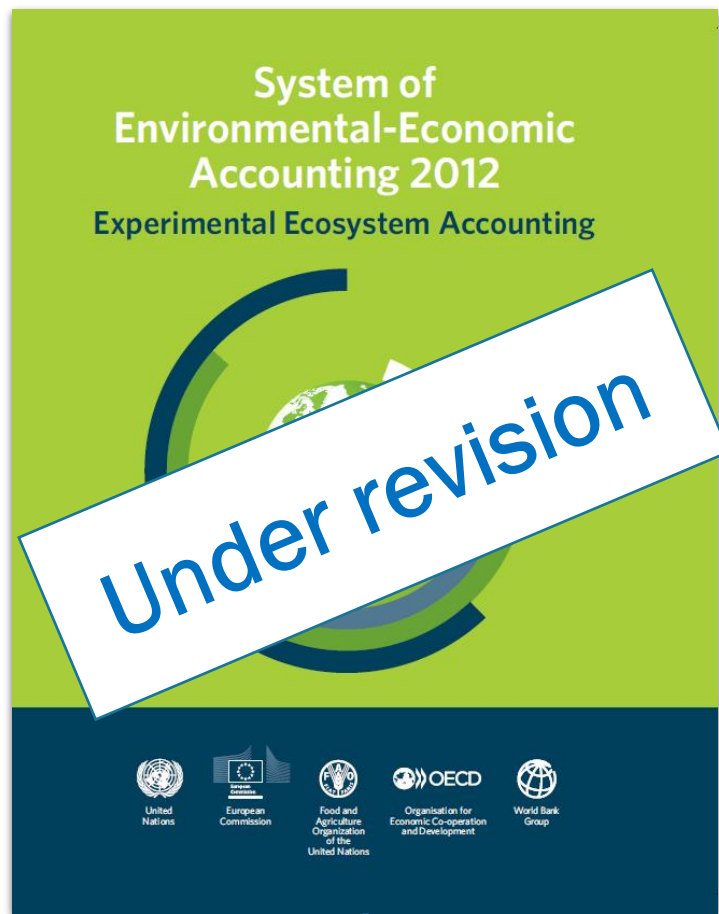
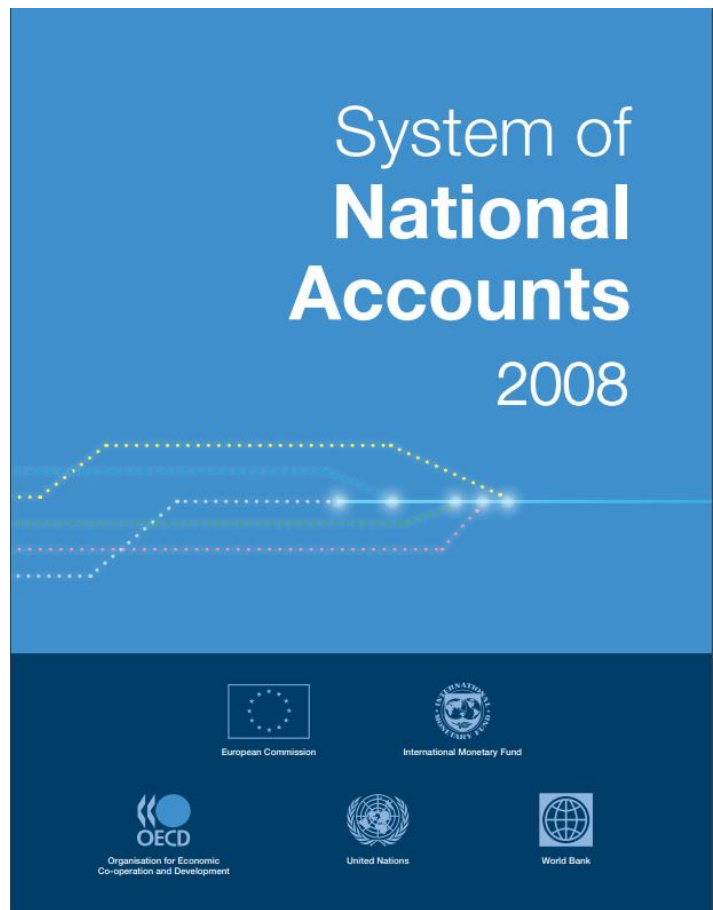
United Nations

The Need

- Our economic well-being crucially depends on nature
- Biodiversity loss and climate change are the biggest challenges we are facing
- But headline indicators like GDP, the unemployment rate and inflation do not capture these important aspects and contributions
- As a result, decision-makers don't have access to key information necessary to effectively pursue and track sustainable development.
- The System of Environmental Economic Accounts (SEEA) fills that gap.



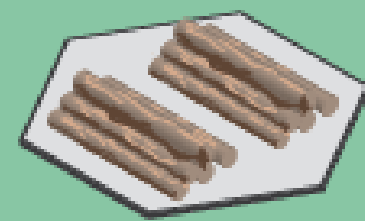
SNA and SEEA – statistical standards



Two sides of the SEEA



Measures
environmental assets
and individual
resources and how the
economy used them



Timber



Water



Fish



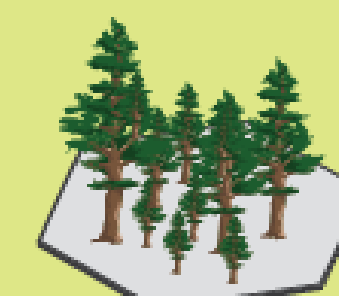
Soil



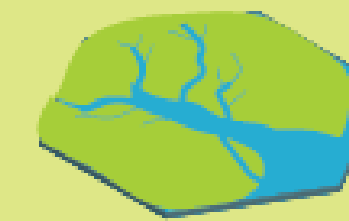
Minerals



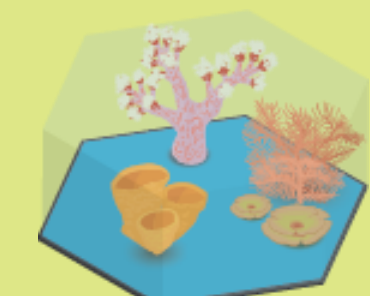
Measures
ecosystems and the
services they provide
to economic and
human activity



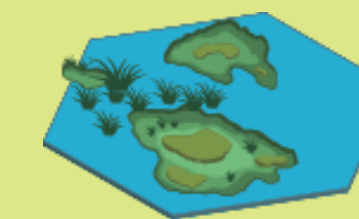
Forests



Rivers

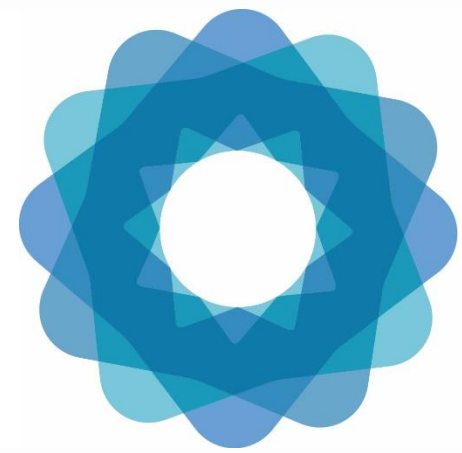


Coral reef



Wetlands

Asset & Resources + Ecosystems = SEEA



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SEEA EEA revision process



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Context of the revision process

- SDGs
 - > Support by the Statistical Commission for the SEEA in the context of the SDG indicators (Goal 6, 11, 13, 14, 15, etc.)
- IUCN World Congress (postponed to 2021)
 - > Motion 070 Accounting for Biodiversity: Encompassing ecosystem, species and genetic diversity
- Post-2020 Global Biodiversity Framework
 - > To be adopted in Kunming, China postponed to 2021
 - > Includes the monitoring framework with indicators
 - > Mainstreaming of biodiversity (Aichi Target 2) is being rediscussed
- United Nations General Assembly Decade for Ecosystem Restoration
 - > *The resolution calls for supporting and scaling up efforts to prevent, halt and reverse the degradation of ecosystems worldwide and raise awareness of the importance of successful ecosystem restoration*
- UN Ocean Conference

Revision of the *SEEA Experimental Ecosystem Accounting*

- Launched in March 2018 with the aim to finish by the end of 2020
 - > For endorsement by UN Statistical Commission in March 2021
- Engagement with various stakeholders – wide engagement of various communities, including ecologists, environmental economists, earth observation, etc.
- Seek for broad involvement of partners and experts in the process – **over 100 experts contributed to drafting of the discussion papers and more than 600 reviewed the papers**
- Ambition to remove the ‘experimental’ from the title
- Ambition is to elevate it to an agreed methodological document – international statistical standard
- Process aligned with the post-2020 global biodiversity framework, review of SDG and climate change process

The revision governance structure

UN Committee of Experts on Environmental-Economic Accounting (UNCEEA)

Chair: Bert Kroese, Statistics Netherlands



SEEA EEA Technical Committee / Editorial Board

Chair: Anton Steurer, Eurostat

WG1: Spatial units

Chair: Sjoerd Schenau, Statistics Netherlands

Finalized discussion papers:

- DP1.1: An ecosystem type classification for the SEEA EEA
- DP1.2: Treatment of ecosystems assets in urban areas
- DP1.3: Treatment of the atmosphere and oceans in the SEEA EEA
- Background paper 1: to discussion paper 1.1 on option 3
- Background paper 2: A review of existing classifications

WG2: Ecosystem condition

Chair: Joachim Maes, EU JRC

Finalized discussion papers:

- DP2.1: Purpose and role of ecosystem condition accounts
- DP2.2: Review of ecosystem condition accounting case studies: Lessons learned and options for developing condition accounts
- DP2.3: Proposed typology of condition variables for ecosystem accounting and criteria for selection of condition variables
- Online supplement to Discussion paper 2.2

WG3: Ecosystem services

Chair: Lars Hein, Wageningen University

Discussion papers under development:

- DP3.1: Proposed concepts, definitions and terminology for ecosystem services for the revised SEEA EEA
- DP3.2: Initial list of ecosystem services for SEEA EEA and selected treatments

WG4: Individual ecosystem services

Chair: Rocky Harris, DEFRA, UK

Finalized discussion papers:

- Towards a definition and classification of terrestrial provisioning services related to crop cultivation and forestry
- Biomass from Fisheries: Provisioning Services and Benefits
- Soil retention (regulating) ecosystem services
- Research paper on air filtration ecosystem services
- Accounting for the water purification ecosystem service
- Defining and valuing carbon related services
- Water flow regulation for mitigating river and coastal flooding
- Water Supply Services: Biophysical Modeling and Economic Valuation in Ecosystem Accounting
- Recreation services from ecosystems
- Research paper on habitat and biodiversity related ecosystem services

WG5: Valuation

Chair: Juha Siikamaki, IUCN

Discussion papers under development:

- DP5.1: Defining exchange and welfare values, articulating institutional arrangements and establishing the valuation context for ecosystem accounting
- DP5.2: A framework for the valuation of ecosystem asset
- DP5.3: Accounting treatments when integrating ecosystem accounts in the SNA
- DP5.4: Recording degradation in ecosystem accounts
- DP5.5: Ecosystem disservices and externalities
- Background paper: Exchange values and welfare values in the SEEA EEA

Subgroup on accounting for biodiversity

Chair: Rosimeiry Portela & Trond Larsen, Conservation International

Review of chapters to ensure biodiversity is adequately represented.

Technical note on spatial aggregation of biodiversity-focused metrics for ecosystem condition accounts (to be published soon)

Working group on SEEA EEA indicators

Chair: Bhanumati, MOSPI, India

Support the SEEA EEA revision process and in particular the drafting of Chapter 14 on indicators.



The revision process: overall timeline



Chapter outline

- Section A: Introduction & overview
 - > Chapter 1: Introduction
 - > Chapter 2: Overview of the ecosystem accounting framework
- Section B: Accounting for ecosystem extent and condition
 - > Chapter 3: Spatial units for ecosystem accounting
 - > Chapter 4: Accounting for ecosystem extent
 - > Chapter 5: Accounting for ecosystem condition
- Section C: Accounting for ecosystem services
 - > Chapter 6: Ecosystem services concepts for accounting
 - > Chapter 7: Accounting for ecosystem services in physical terms
- Section D: Monetary valuation and integrated accounting for ecosystem services and assets
 - > Chapter 8: Principles of monetary valuation for ecosystem accounting
 - > Chapter 9: Accounting for ecosystem services in monetary terms
 - > Chapter 10: Accounting for ecosystem assets in monetary terms
 - > Chapter 11: Integrated and extended accounting for ecosystem services and assets
- Section E: Complementary valuations, thematic accounting and indicators
 - > Chapter 12: Complementary approaches to valuation
 - > Chapter 13: Accounting for specific environmental themes
 - > Chapter 14: Indicators and combined presentations

Ongoing global level engagement

- SEEA Community
 - > Expert forums, London Group, Communities of Practice
- Global Indicator initiatives
 - > SDG, CBD, UNCCD
- Global data and accounting initiatives
 - > NCAVES, ARIES, MAIA, ESA, NASA, EO4EA, SNA revision (AEG meetings); Global Ocean Accounts Partnership
- Other engagement
 - > IUCN World Congress, IPBES values assessment, Dasgupta review, wealth accounting (incl. WAVES); Corporate accounting & Capitals Coalition; Postponed Yale conference with leading economists; GEP project with NatCap - Stanford

Please comment!





THANK YOU

seea@un.org